



Iowa STEM Advisory Council Request For Proposals STEM Schools and Classrooms

I. Background

Executive Order Number 74 signed by Iowa Governor Terry E. Branstad on July 26, 2011, declared that science, technology, engineering and mathematics (STEM) education should be strengthened as part of providing a world-class education, encouraging innovation and enhancing economic development in Iowa. The Iowa Governor's STEM Advisory Council was formed as a partnership of business, policy and education leaders from across the state.

In FY2014, the Iowa Governor's STEM Advisory Council has designated a matched portion of the state legislative funding to promote Redesigned STEM Learning Environments. The number of proposals accepted will depend upon available funds and proposal requests.

II. Introduction

A sub-committee of the STEM Council has studied various school models across the country. While there is no single recommended format for all Iowa STEM education, the Advisory Council supports a model, characterized by specific criteria. The Iowa STEM model will foster a consistent approach to STEM education, yet allow for the organic development of STEM programs matching local strengths, challenges and resources.

Three Key Attributes of Iowa STEM Educational Model

- **Redesigned STEM Learning Environments**
 - ✓ *Technology rich*
 - ✓ *Collaborative, flexible spaces*
- **Integrated STEM curriculum focused on personalized, deeper learning**
 - ✓ *Mastery of Iowa Core curriculum, with deeply integrated STEM*
 - ✓ *Self-directed Learning and Competency Based Education Pathways*
 - ✓ *Instructional strategies promoting inquiry, engineering problem solving and project-based learning*
 - ✓ *Focus on the Iowa Core Universal Constructs and Characteristics of Effective Instruction*
 - ✓ *Authentic Assessment, Real World Problem Solving Context*
 - ✓ *Career and College Readiness in STEM fields*
- **Community Based Partnerships**
 - ✓ *Higher Education*
 - ✓ *STEM Businesses*
 - ✓ *Active Learning (Non-formal) Education*

III. Eligibility

All Iowa private and public school districts and buildings serving students in any of grades 6 through 12 are eligible to apply.

Top quality proposals will

- Describe the development of a cohesive plan to create and support a STEM Redesigned Learning Environment that meets the criteria as described by the Iowa STEM Advisory Council. (Appendix A)
- Plan for the implementation of an integrated STEM curriculum with a focus on personalized, deeper learning with clear local connections. (Appendix B)
- Involve community and private sector partnerships that leverage local resources and improve program sustainability with cash or in-kind support. (Appendix C)
- Demonstrate a commitment to staff development as needed to support the program proposal implementation, specifically utilizing Iowa higher education partners for the delivery of PD related to the redesigned learning environments.

IV. Timeframes and Selection Process

July 15, 2013: RFP Release

August 8, 2013: Webinar for potential applicants

August 30, 2013: Proposal Due Date

September, 2013: Proposal Review

All proposals submitted in accordance with this RFP will be reviewed by a Selection Committee appointed by the Governor's STEM Advisory Council. The committee will recommend finalists for the site visit phase by October 1, 2013.

October, 2013: Selection Committee Site Visits

Members of the selection committee will conduct site tours, interview relevant school and community leaders, and observe brief proposal presentations by students and staff.

November 1, 2013: Grant Recipients Announced

The Advisory Council Co-chairs will determine final awardees based upon the recommendation of the Selection Committee. The recipients will be rated according to the criteria described in this document.

November thru June, 2014: Design, Build, Equip

- a. Equipment, furniture and technology orders and installation
- b. Teacher training in use of Redesigned STEM Learning Environments (providers include the University of Iowa classroom trainers or others familiar in redesigned learning environments. Resources will be made available to selected districts.
- c. Classes and events scheduled into Redesigned STEM Learning Environments.

Fall, 2014: Implementation of Redesigned STEM Learning Environments

Summer, 2015: Assessment and Evaluation

V. Funding and Cost Share

The Iowa Governor's STEM Advisory Council will provide funding support in the following areas, **not to exceed \$50,000** for FY2014. A matching investment by the applicant is required.

- ✓ **Furniture, Technology and Equipment Costs associated with a Redesigned Learning Environment (see Appendix A for specifics)**
Proposal may include classroom furniture, equipment, technology or other operational or infrastructure costs associated with the redesigned learning environment.
- ✓ **District Team Site Visits**
Proposal may include travel expenses for District Teams (comprised of administration, community partners, teachers and students) to visit an exemplary STEM school model to insure fidelity of implementation.
- ✓ **Professional Development for STEM teachers and partners**
Proposal may include costs to provide training in the use of redesigned learning environments, and STEM professional development. Project proposal may also include costs for curriculum development. Note that the University of Iowa has offered to provide Professional Development associated with the T.I.L.E. classrooms (described later in this document) at no cost. Other partners may be identified in the proposal to provide professional development.

VI. Proposal Content Requirements

Format

Page Limit: maximum 14 pages total with section page limits as indicated.
 Single Spaced with 1-inch margins

Proposal Components:

- ✓ Cover Form (with Superintendent's signature)
- ✓ Community, District and School Demographics (1 page)
- ✓ Assessment of Present STEM education opportunities in School or District (1 page)
- ✓ Evidence of plan to implement elements #1-6 as described below, with a budget narrative that includes sources and amounts of matching funds. (11 pages)
- ✓ Statement of District/School goal or vision at completion of Proposal implementation (Summer, 2015) (1 page)
- ✓ Supporting Letters (not included in 10 page count) from
 - ___ Letter of support from Higher Education partner
 - ___ Letter of support from Area Business partner
 - ___ Letter of support from Non-formal STEM partner
 - ___ Letter of support from District Superintendent

VII. Proposal Elements

1.	Redesigned Learning Environment: Proposal demonstrates operational plans that account for physical space, technical support and operational system capacity including physical space, equipment and infrastructure. See Appendix A for specific description of the STEM Learning Environments.
2.	STEM Curriculum: Proposal demonstrates plans to create and implement an integrated STEM curriculum with a focus on personalized, deeper learning to students in any of grades six through twelve. See Appendix B for specific descriptions of a STEM Curriculum.
3.	Community Partnerships: Proposal provides evidence (including letters of support or commitment) of strong partnerships and collaboration with <ol style="list-style-type: none"> Higher Education Partner(s), Private Sector Business Partner(s) and, Non-formal or Active Learning Partner(s). See Appendix C for specific descriptions of community partnerships.
4.	Budget and Cost Share: Proposal includes detailed budget including assurances that the school has received commitments of sustained and verifiable fiscal and in-kind support from regional education and business entities. Budget may include equipment, furniture, technology (See Appendix E for an example), travel expenses for team site visits (in-state or out-of-state), and professional development (please describe).
5.	Professional Development: Documentation of staff training plan, which includes commitment to utilize specific training in the use of Redesigned Learning Environments such as T.I.L.E. at the University of Iowa.
6.	Evaluation: Proposer is responsible for evaluation in consultation with the Council's evaluation team. Final award recipients will: <ul style="list-style-type: none"> • Manage project outcomes and deliverables with the support of the Advisory Council throughout the program period. • Execute ongoing monitoring of the project implementation and work with the Evaluation Team of the Governor's STEM Advisory Council. • Collect observational and qualitative data, through such data collection activities as site visits, classroom observations, administrator and faculty interviews and student focus groups. • Provide administrative data regarding teachers and students which may include but is not limited to the following: <ul style="list-style-type: none"> ✓ Teacher observations and training data ✓ Student and teacher attendance data ✓ Standardized test results and grades

APPENDIX A: Redesigned Learning Environments

STEM education is inherently different from traditional, lecture-driven teaching and learning. STEM is “...an interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering and mathematics in contexts that make connections between school, community, work and the global enterprise enabling the development of STEM literacy and with it the ability to compete in the new economy.”¹

STEM is interactive, dynamic, collaborative, inquiry driven, multi-disciplinary, and student-centered. Technology must be seamlessly embedded and ubiquitously available to both teachers and learners. Workspaces facilitate pathways of communication and creativity. A STEM learning environment encourages tangential discoveries and multi-faceted decision-making. STEM exploration results in spontaneous creating, building, making and doing. As educators begin to understand STEM as a pedagogical approach, the need for redesigned learning environments to support a new way of teaching and learning becomes clear.

A considerable body of research exists to support the assertion that redesigned learning environments promote flipped classroom instruction, peer teaching, active learning and “[upside down pedagogies](#)”.² STEM learning environments may require a full or partial re-design of existing traditional lecture-based classrooms. For schools interested in investing in new educational spaces for STEM teaching and learning, the challenge is obvious: the future of STEM simply cannot fit into a 19th century container. Traditional classrooms with teacher-centered lecture stations, desks and chairs in rows (designed to keep kids still and quiet), and technology designed only for the teacher’s use will not allow STEM to flourish.

Iowa needs educators, scientists, architects, engineers, artists, technologists, designers, and learners to collaborate to re-envision the learning environment needed to support STEM pedagogy. For instance, furniture should be easy to reconfigure, allowing for diverse teaching methods including project-based learning, blended learning or direct instruction. The teacher should be able to facilitate whole group learning, small group work or individualized study. Freedom of movement for both learners and teacher is essential.

In a redesigned learning environment, technological assets, like “smart boards”³ or “Promethean tables”⁴, are situated primarily for student use. The goal of interactive technology in a STEM classroom is to empower teachers and students who can work toward personalized learning goals. Integrated technology use connects students with information systems, models, databases, and remote STEM experts. Technology can facilitate mentoring programs, or allow access to social networking resources for STEM ideas during and outside the traditional school settings.

¹ Tsupros, N., Kohler, R., & Hallinen, J. ,2009, in *STEM education: A project to identify the missing components*, Center for STEM Education and Leonard Gelfand Center for Service Learning and Outreach, Carnegie Mellon University, Pennsylvania

² Beichner, Robert, University of North Carolina, <http://scaleup.ncsu.edu/FAQs.html>

³ <http://smarttech.com/smartboard>

⁴ <http://www.prometheanworld.com/us/english/education/home/>

Technology in re-designed learning environments can flatten traditional hierarchies.⁵

Current Iowa Models of Redesigned Learning Environments:

The **University of Iowa** has invested in T.I.L.E. (Transform, Interact, Learn, Engage) classrooms, which increase conceptual understanding among learners, and decrease failure rates especially among women and minorities (groups that are traditionally underrepresented in STEM).



At the **University of Iowa**, T.I.L.E. classrooms are equipped with the following:⁶

T.I.L.E. Classroom Technology Components

- Large monitor display for each student table
- Large screens and projectors that allow viewing of an image by the entire class
- Switching technology controlled by the instructor, allowing the instructor to switch images between many different monitor locations
- Network connectivity (wireless or wired, as appropriate) for student computers (personally owned or supplied by the school)
- Microphones available at each table in larger rooms
- Additional technology as needed to supply presentation and multi-media content (DVD or Blu-ray players, document cameras, etc)
- Monitors for instructors to provide annotation capability, etc.

T.I.L.E. Classroom Furnishing Characteristics

- Instructor podium that does not dominate the classroom, nor is there an obvious space that represents the traditional front of the room
- Room furnishings designed to promote student collaboration
- Chairs that are movable
- Tables and writing surfaces allowing students to work in small groups
- Ample surfaces for student work (whiteboards, glass boards or slate boards)

At the **University of Northern Iowa**, the concept is called the Transformative Education Environment or T.E.E. The T.E.E. is set up to maximize flexibility in terms of how the students in the classroom can interact with each other. The room is flexible with light-weight tables and chairs on wheels. Robust wireless capabilities allow students to connect to large displays to complete group collaborative activities. The facilitation of project/problem-based learning is the central focus of the T.E.E. learning environment that can be changed to meet the varying needs of teachers

⁵ Lynch, Sharon J; Behrend, Tara; Burton, Erin Peters; [“Inclusive STEM Focused High Schools: STEM Education Policy and Opportunity Structures”](#). Paper prepared for the NARST 2013 Annual International Conference in Puerto Rico, April 6-9, 2013.

⁶ University of Iowa [T.I.L.E. Classrooms](http://tile.uiowa.edu/): Transform, Interact, Learn and Engage: <http://tile.uiowa.edu/>

and learners.

In redesigned learning environments, there is an ongoing shift towards **personalized learning within a dynamic setting**. Classrooms transition to a studio environment where students are engaged in theme-based content, pursuing individual or group interests. Differentiated instruction becomes the norm rather than the exception in a redesigned classroom—with a positive impact in engaging all learners. These classroom environments thus become more inclusive learning settings for exceptional learners, students with disabilities and English Language Learners because they promote peer-to-peer, group and teacher collaboration throughout the entire learning experience. This STEM school vision encompasses all learners in the state, seeking to include high ability, underrepresented, and nontraditional students in STEM exploration and enrichment.

Bob Pearlman, a key national architect of education innovation writes, *“The signature characteristic of 21st century schools is students at work. Pedagogy—a project-based curriculum and companion performance assessment—enables this new shape of schooling. But it is technology and new learning environments that support this new collaborative culture.”*⁷

⁷ Pearlman, Bob; “Designing New Learning Environments to Support 21st Century Skills”

APPENDIX B: Integrated STEM curriculum: Personalized, Deeper Learning

Iowa STEM Schools will inspire innovative, lifelong learners within interdisciplinary environments, stimulating constructive connections between seemingly abstract concepts and encouraging insightful leadership via technology-rich, real-world academia anchored by global literacy.

A robust STEM curriculum, focused on personalized, deeper learning will include

- Mastery of STEM focused, academic curriculum, including integration into non-STEM subjects
- Self-directed Learning and Competency Based Education Pathways⁸
- Reformed Instructional Strategies and Project Based Learning
- Focus on the Universal Constructs⁹:
 - ✓ Critical Thinking
 - ✓ Complex Communication
 - ✓ Creativity
 - ✓ Collaboration
 - ✓ Flexibility and Adaptability
 - ✓ Productivity and Accountability
- Authentic Assessment
- Career and College Readiness as key outcome

Integrated STEM teaching and learning makes explicit what is too often implicit in how experts across STEM disciplines construct, apply and create knowledge. First, an integrated STEM curriculum will help shape student decision-making related to career choice and civic life. An integrated approach to the STEM and non-STEM disciplines will result in a **re-imagined use of time in school**, allowing students to engage with content in novel and deeper ways. Students will be encouraged to deploy tools and technologies that build local system capacity while retaining the perspective of global citizenry. The curricular integration that is closely tied to STEM studies “assists students to transfer knowledge, helps them to focus on big ideas and increases motivation to learn.”¹⁰

Second, an integrated STEM curriculum will facilitate **practices of global citizenry** on issues of deep complexity. The science, social science and engineering communities have documented many of the grand challenges¹¹ of our time (i.e., energy, food, water and cyber security), which will require sustained effort over generations. Finding answers to such ill-structured problems will require intentional cross-curricular links and thoughtfully constructed concepts that reinforce the challenges facing present and future generations. Students will require learning spaces that embrace failure (ie., experimentation and design) as an important aspect of their academic

⁸ [STEM Learner Readiness for Post-Secondary and Career Committee](#), prepared for Advisory Council, 2011.

⁹ http://educateiowa.gov/index.php?option=com_content&view=article&id=2089

¹⁰ Rennie, L. Veville, G. Wallace, J. (2012). Knowledge that Counts in a Global Community: Exploring The Contribution of Integrated Curriculum. New York, NY: Routledge Taylor and Francis Group.

¹¹ Grand Challenges in Engineering, <http://www.engineeringchallenges.org/>

experience. They will need to develop collaborative skills that mesh physical and virtual environments. Increasingly students are learning and working in hybrid spaces, "third spaces", that require unique tools and skill sets.

Finally, it is not enough to provide even the best "in-class" or "stand alone" curriculum. Pedagogical success requires that students **exercise agency (are empowered)** to define the question, test ideas, choose the appropriate resources, and develop solutions as a way of understanding systems (physical, natural, virtual) and their relations. Students must be provided space, resources and instructional scaffolds that help them develop learning strategies to support their inquiries.

APPENDIX C: Community Based Partnerships

Higher Education Partners

Iowa schools already have well-established pathways of partnership with institutes of higher education. Post-secondary enrollment, concurrent enrollment and career academies serve both rural and urban schools. However, partnership between institutions of higher education and STEM schools should explore new strategies to strengthen ties, and to extend non-traditional, credit earning or extended learning opportunities for all students.

A variety of “early college” models exist across the nation. Within the context of a STEM school, partnerships with post-secondary institutions need to consider the importance of providing student supports throughout a *blended high school and college* experience. STEM schools must also work to create innovative strategies to better serve the intellectual and developmental needs of underrepresented sub-groups in STEM fields.

Local and Regional Business Partners

Student learning goals and activities can extend beyond the traditional classroom to incorporate real-world learning with local connections. Secondary students may participate in internships, facilitated mentoring programs and other off-campus learning opportunities. Teachers are encouraged to participate in Iowa’s externship program, supported by the Advisory Council. The use of facilitated mentoring programs to build connections between Iowa’s students and STEM professionals is encouraged.

Iowa STEM schools must build meaningful partnerships with community business partners as a mechanism to ensure career and college readiness for all of Iowa’s young people. One measure of success will be an increase in the number of Iowa students who can demonstrate their qualifications on the National Career Readiness Certification¹² exam. In collaboration with the Iowa Workforce Development, the Skilled Iowa initiative seeks to promote the NCRC as an “industry-recognized, portable, evidence-based credential that certifies essential skills needed for workplace success”.¹³

Non-Formal Education Partners/ Active Learning Partners

Museums, libraries, science centers and clubs are the non-formal education entities which play a vital role in supporting underrepresented students for STEM. Iowa STEM is committed to the idea that STEM fields present vibrant life and career opportunities for all students. Non-formal partners can help to provide bridge programs, tutoring programs, extended school day, and year-round learning with an emphasis on developing a “STEM identity”.

¹² <http://skillediowa.org/>

¹³ [Skilled Iowa Report](#), 2012, Iowa Workforce Development in Partnership with ACT.

APPENDIX D: RESOURCES

STEM School Resources

Hewlett Foundation focuses on “ Deeper Learning ” as a strategy of education reform. See also the Strategic Plan Summary of Hewlett’s Educational Program.
North Carolina STEM Learning Network has compiled a list of STEM attributes, and a set of STEM School Rubrics to evaluate STEM schools at the elementary, middle and high school levels.
The Ohio STEM Learning Network advocates five “ Platform Design Principles ” for STEM schools and hubs.
EdWorks , a subsidiary of KnowledgeWorks , advocates for a STEMLab High School model that emphasizes Problem Based and Inquiry Learning. FastTrack is an early college model that promotes career and college readiness.
P-TECH High School in New York City is garnering national attention as a model partnership between business, K-12 and Higher Ed. The Iowa site visit report highlights of team learning.
“ STEM Pathways to College and Career Schools, A Development Guide ” is intended to help education leaders at the school and college levels, and business leaders in IT and other sectors, get started on the collaborative process of designing and building a STEM Pathways to College and Careers school (STEM-PCC school).
The Arizona Science Foundation STEM Network created The STEM Immersion Guide , which “offers a roadmap to establish project-based STEM instruction, leadership development and community support. It was created to provide practical direction that can empower teachers and administrators, schools and districts.”
Lynch, Sharon J; Behrend, Tara; Burton, Erin Peters; “ Inclusive STEM Focused High Schools: STEM Education Policy and Opportunity Structures ”. Paper prepared for the NARST 2013 Annual International Conference in Puerto Rico, April 6-9, 2013.

STEM Learning Environments Resources

Beichner, Robert, University of North Carolina, http://scaleup.ncsu.edu/FAQs.html
“ 7 Things You Should Know About Collaborative Learning Spaces ”, Educause Learning Initiative, January 2013. Accessed 4/19/2013 (http://www.educause.edu/library/resources/7-things-you-should-know-about-collaborative-learning-spaces)
University of Iowa T.I.L.E. Classrooms : Transform, Interact, Learn and Engage: http://tile.uiowa.edu/
S. Van Horne, C. Murniati, J. Gaffney, M. Jessie, Promoting active learning in technology-infused TILE classrooms at the University of Iowa , <i>Journal of Learning Spaces</i> , 1, 2, (2012)
Nationally recognized Bob Pearlman on designing new Learning Environments to support 21 st Century Learning. Accessed 4/22/2013. (http://files.solution-tree.com/pdfs/Reproducibles_21CS/chap6_designing_new_learning_environments.pdf)
Zitter, I. and A. Hoeve (2012), “ Hybrid Learning Environments : Merging Learning and Work Processes to Facilitate Knowledge Integration and Transitions”, OECD Education Working Papers, No. 81, OECD Publishing. http://www.oecd.org/edu/ceri/Zitter%20and%20Hoeve.Hybrid%20Learning.pdf

APPENDIX E: EXAMPLE EQUIPMENT LIST

The following list is meant to serve as a suggestion OR example of a list for equipping a redesigned learning environment, based on other Iowa models. Proposals may include different equipment, technology or furniture specific to the proposer's needs.

Quantity	Unit	Equipment and Infrastructure	Unit Price	Amount	Reference
		Furniture	In dollars	In dollars	
30	Each	Student Chairs	189	5670	Steelcase.com
6	Each	Student Desk	358	2148	Steelcase.com
1	Each	Coach's Desk	358	358	Steelcase.com
1	Each	Coach's Chair	189	189	Steelcase.com
6	Each	Mobile Whiteboards	629	3774	Steelcase.com
		Equipment			
1	Each	Document Camera	150	150	Touchboards.com
6	Each	SmartDesk or Surface Tables	TBD	0	Smart.com
1	Each	Presentation Monitor or Projector	400	400	NEC
		Software Services			
1	Each	Cloud Storage Service (e.g., Dropbox and Google Drive)	120	120	100 Gig Storage (Dropbox)
30	Each	Open Source Productivity Tools (Google Drive)	0	0	Google
30	Each	Data Visualization & Modeling Tools (e.g., Tinker Plot, Fathom, Geometer's SketchPad, CAD/CAM)	300	9000	Keycurriculum.com
30		Data Collection Tools (e.g., Pasco or Vernier Probeware)	75	2250	Include a variety of probes based on curricular themes
30	Each	Conferencing Tools (e.g., Skype, Google+, Twitter)	0	0	Skype, Google, Twitter
1	Each	Open Source LMS Infrastructure (e.g., Eliademie, Edmodo)	0	0	Elidemie, Edmodo
		Hardware			
30	Each	A combination of Google Chrome, Surface and/or Mac	800	24000	HP, Apple

APPENDIX F: PROPOSAL SCORING RUBRIC

Criteria	Top Score	Comments
<p>1) Redesigned Learning Environment: Proposal demonstrates operational plans that account for physical space, technical support and operational system capacity including physical space, equipment and infrastructure.</p> <p><i>Top points will be awarded for proposals which demonstrate commitment to the design and implementation of STEM Learning Environments as described in Appendix A.</i></p>	25 pts	
<p>2) STEM Curriculum: Proposal contains evidence that the STEM Redesigned Learning Environment will offer a robust, integrated STEM curriculum with a focus on personalized, deeper learning to students in any of grades six through twelve, especially inclusive of students underrepresented in STEM (females, students of ethnic or racial minority groups, and students with disabilities). The following key components are addressed:</p> <ul style="list-style-type: none"> ✓ <i>Mastery of Iowa Core curriculum, with deeply integrated STEM</i> ✓ <i>Self-directed Learning and Competency Based Education Pathways</i> ✓ <i>Inquiry Driven Instructional Strategies and Project Based Learning</i> ✓ <i>Focus on the Iowa Core Universal Constructs</i> ✓ <i>Authentic Assessment</i> ✓ <i>Career and College Readiness in STEM fields</i> <p><i>Reviewers will consider exemplary deployment of key components with a clear link to their connection with innovation and economic interest in the local area, as described in Appendix B.</i></p>	35 pts	
<p>3) Community Partnerships: Proposal provides evidence (including letters of support or commitment) of strong partnerships and collaboration with</p> <ul style="list-style-type: none"> d) Higher Education Partner(s), e) Private Sector Business Partner(s) and, f) Non-formal or Active Learning Partner(s). 	15 pts	

<p><i>Reviewers will look for genuine partnerships inclusive of key stakeholders. Evidence of enthusiastic community and Higher Ed support and commitment should be demonstrated through letters offering specific, ongoing support and commitment. The partnerships should include involvement in curriculum development and instructional design including business-sponsored projects, mentoring, accelerated learning opportunities, etc. as described in Appendix C.</i></p>		
<p>4) Budget and Cost Share: Detailed Budget and assurances that the school has received commitments of sustained and verifiable fiscal and in-kind support from regional education and business entities.</p> <p><i>Rubric score will be dependent upon amount and type of in-kind and financial support from regional industry and educational partners.</i></p>	10 pts	
<p>5) Professional Development: Documentation of staff training plan, which included specific training in the use of Redesigned Learning Environments.</p> <p><i>Top points awarded for proposals which include evidence of strong teacher leadership and commitment to an integrated STEM curriculum as described in Appendix B.</i></p>	10 pts	
<p>6) Evaluation: Proposal ensures a competent, comprehensive internal program evaluation, both qualitative and quantitative, in cooperation with Council evaluators.</p> <p><i>Top points awarded to proposals that give clear assurance of capacity and expertise to evaluate, in cooperation with the STEM Advisory Council evaluation process.</i></p>	5 pts	

APPENDIX D: COVER FORM

School or District _____

District Superintendent _____

Project Director _____

Contact Information

Address: _____

Phone: _____

Email: _____

Statements (to be initialed by District Superintendent)

_____ I agree to a Selection Committee site visit as a component of the two-part Review Process. Members of the selection committee will conduct site tours, interview relevant school and community leaders, and observe brief proposal presentations by students and staff.

_____ If selected, the school agrees to conduct, in consultation with the STEM Council's evaluators, a thorough evaluation throughout the term of the program. The evaluation will include the collection and analysis of both quantitative and qualitative data.

Items Included in Proposal:

___ Cover Form

___ Proposal (limit 14 pages in length)

___ Additional Supporting Documents

Please Return by August 30, 2013 to

Executive Director Jeff Weld, PhD.
Iowa Governor's STEM Advisory Council
214 East Bartlett Hall
University of Northern Iowa
Cedar Falls, IA 50614-0298